

**CLAIMS:**

1. An imaging apparatus comprising:  
a first linear array of photosites, arranged in an array direction, and having a first spatial resolution along the array direction;  
a second linear array of photosites, having a second spatial resolution, different from the first spatial resolution, along the array direction; and  
means for moving an original image relative to the linear arrays of photosites in a process direction perpendicular to the array direction.
2. The apparatus of claim 1, the first linear array of photosites having a first color filtering arrangement; and  
the second linear array of photosites having a second color filtering arrangement, different from the first color filtering arrangement.
3. The apparatus of claim 2, the first color filtering arrangement being white, and the second color filtering arrangement being a primary color.
4. The apparatus of claim 2, the first color filtering arrangement being green, and the second color filtering arrangement being a primary color.
5. The apparatus of claim 1, the first linear array of photosites having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array of photosites having an effective length along the process direction equal to  $n$ .
6. The apparatus of claim 1, the first linear array of photosites having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array of photosites having an effective length along the process direction greater than  $n$ .

7. The apparatus of claim 1, the first linear array of photosites having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array of photosites having an effective length along the process direction less than  $n$ .

8. The apparatus of claim 1, two photosites in the first linear array corresponding to each one photosite in the second linear array, the first linear array having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array having an effective length along the process direction of about  $n/2$ .

9. The apparatus of claim 1, two photosites in the first linear array corresponding to each one photosite in the second linear array, the first linear array having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array having an effective length along the process direction of about  $2n$ .

10. The apparatus of claim 1, three photosites in the first linear array corresponding to each one photosite in the second linear array, the first linear array having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array having an effective length along the process direction of about  $n/3$ .

11. The apparatus of claim 1, three photosites in the first linear array corresponding to each one photosite in the second linear array, the first linear array having an effective length  $n$  along a process direction perpendicular to the array direction, and the second linear array having an effective length along the process direction of about  $3n$ .

12. The apparatus of claim 1, further comprising a third linear array of photosites, the third linear array of photosites having a spatial resolution along the array direction equal to the spatial resolution of the second linear array of photosites.

13. The apparatus of claim 12, the third linear array of photosites having a third color filtering arrangement, different from the second color filtering arrangement.

14. The apparatus of claim 13, the first color filtering arrangement being green, the second color filtering arrangement being a first non-green primary color, the third color filtering arrangement being a second non-green primary color different from the first non-green primary color.

15. The apparatus of claim 13, the first color filtering arrangement being white, the second color filtering arrangement being a first non-green primary color, the third color filtering arrangement being a second non-green primary color different from the first non-green primary color.

16. The apparatus of claim 1, wherein the first linear array is associated with a first CCD, and the second linear array is associated with a second CCD.

17. The apparatus of claim 1, wherein a plurality of photosites in the first linear array and a photosite in the second linear array are associated with a single transfer circuit connected to an output line.